

Attorney Docket No.: 42P14871

Application No.: 09/900,426

PROPOSED CLAIM AMENDMENTS

1. (Currently Amended) A method for operating a laser with a semiconductor gain region, comprising:

(a) sensing voltage across said gain region; and

(b) determining cavity optical losses according to said sensed voltage ^{medium} ~~across~~ ^{applied to} said gain region; and

(c) adjusting a loss characteristic associated with said laser according to said sensed voltage across said gain medium.

5. (Currently Amended) A method for controlling performance of a laser cavity having a beam traveling therethrough, comprising:

(a) sensing voltage across a gain medium emitting said beam; and

(b) determining optical losses associated with said cavity according to said sensed voltage across said gain medium; and

(c) adjusting a loss characteristic of said cavity according to said sensed voltage across said gain medium.

21. (Previously Amended) A laser apparatus, comprising:

(a) a gain medium to emit a coherent beam along an optical path;

(b) a reflector positioned in said optical path and defining a laser cavity;

(c) a voltage sensor operatively coupled to said gain medium to monitor voltage across said gain medium; and

(d) a control system operatively coupled to said voltage sensor and to an optical loss element positioned in said optical path in said cavity, said control system to adjust said optical loss element according to said monitored voltage across said gain medium to reduce optical losses associated with said cavity.

28. (Currently Amended) A laser apparatus, comprising:

(a) laser gain medium means for emitting a coherent beam across a laser cavity;

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- (b) loss means for producing a loss characteristic, said loss means positioned in association with said laser cavity;
- (c) means for monitoring voltage across said gain medium means; and
- (d) means for determining said loss characteristic according to voltage monitored across said gain medium means; and
- (e) means for adjusting said loss element according to an error signal derived from said monitored voltage across said gain medium.